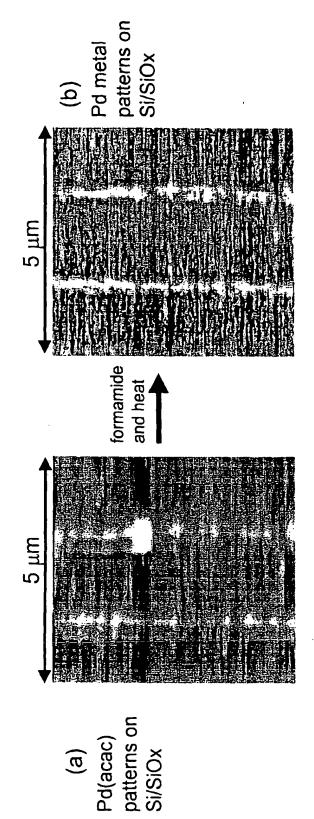
CONDUCTIVE PATTERNS USING NANOLITHOGRAPHY AS A PATTERNING TOOL

Inventors: Crocker et al. Docket No.: 083847-0200

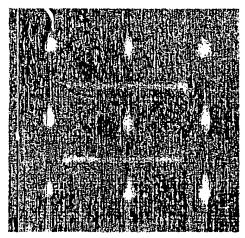


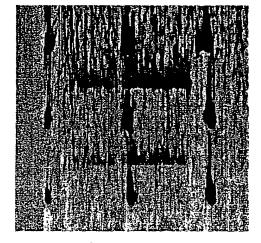
Rv: -0.2901 nm 4.00 µm Height Profile 2.00 1.173 nm Fig. 1 Ra: 0.9275 nm Rq: 0.2923 nm 0.8000-E 609 1.200-

(c)
Line scan indicating
average height of
metal lines

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(b)
Pd metal
patterns on
Si/SiOx





(a)
Pd²⁺ patterns
on Si/SiOx

•

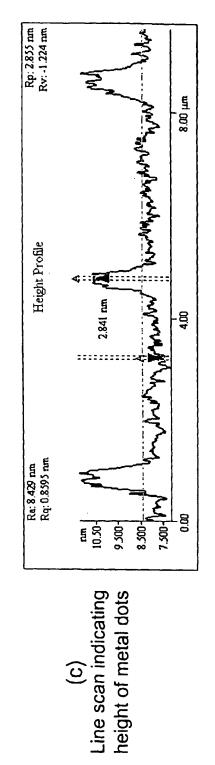
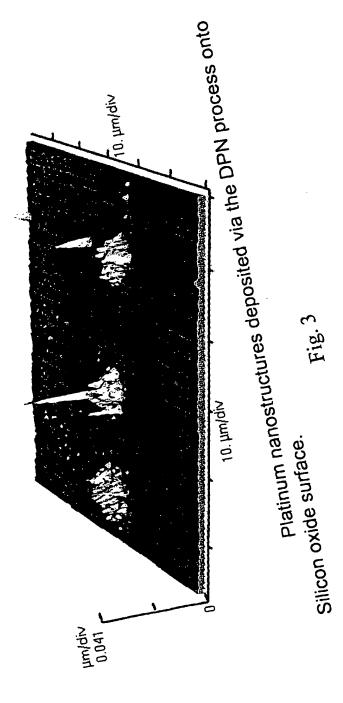


Fig. 2

Title: PROCESSES FOR FABRICATING
CONDUCTIVE PATTERNS USING
NANOLITHOGRAPHY AS A
PATTERNING TOOL
Inventors: Crocker et al.
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Deposition of palladium

After heating at 120°C

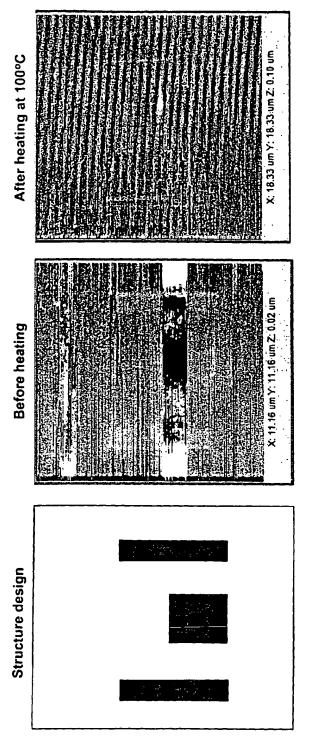
Before heating

Structure design

Fig. 4

Title: PROCESSES FOR FABRICATING CONDUCTIVE PATTERNS USING NANOLITHOGRAPHY AS A PATTERNING TOOL

Inventors: Crocker et al. Docket No.: 083847-0200



0.5 gm of Palladium(II) acetate (Aldrich) was added to a 10 ml methanol, then 0.4 gm of acetic acid (EM science) was added to the mixture in small portion. The content were allowed to stir for 5 h at room temperature under Ar.

After heating at 100°C, the image was taken using a clean tip. The lateral force image before heating was imaged using the Palladium coated tip

F1g. >